

US009638483B1

# (12) United States Patent Hoffman et al.

# (54) AMMUNITION MAGAZINE FOR RECIPROCALLY-CYCLED WEAPON

(71) Applicants: **Brian Hoffman**, Bangor, PA (US); **Alexander Smith**, Long Valley, NJ (US); **Hansen Lukman**, Rockaway, NJ

(US)

(72) Inventors: **Brian Hoffman**, Bangor, PA (US); **Alexander Smith**, Long Valley, NJ (US); **Hansen Lukman**, Rockaway, NJ

(US)

(73) Assignee: The United States of America as
Represented by the Secretary of the

Army, Washington, DC (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 129 days.

(21) Appl. No.: 14/659,739

(22) Filed: Mar. 17, 2015

## Related U.S. Application Data

- (60) Provisional application No. 62/026,180, filed on Jul. 18, 2014.
- (51) Int. Cl. F41A 9/00 (2006.01) F41A 9/61 (2006.01) F41A 9/79 (2006.01) F41A 7/08 (2006.01) F41A 9/30 (2006.01)

(52) **U.S. CI.** CPC **F41A 9/79** (2013.01); **F41A 7/08** (2013.01); **F41A 9/30** (2013.01)

(58) **Field of Classification Search**CPC ....... F41A 9/79; F41A 7/08; F41A 9/30

# (10) Patent No.: US 9,638,483 B1 (45) Date of Patent: May 2, 2017

#### (56) References Cited

#### U.S. PATENT DOCUMENTS

2,180,741	A	*	11/1939	Lisov F41A 9/64
				42/50
2,494,728	Α	*	1/1950	Stacey F41A 9/25
				89/33.16
2.870.675	Λ	*	1/1959	Salisbury F41B 6/00
2,670,073	71		1/1333	•
				124/3
4,343,223	Α	*	8/1982	Hawke H05H 1/54
				124/3
4,677,895		ak	7/1987	Carlson F41B 6/006
4,077,893	Α	•	//198/	
				124/3
4,733,595	A	n)c	3/1988	Oberly F41B 6/006
1,733,333	4.1		3/1700	•
				124/3
4,813,332	Α	*	3/1989	Jasper, Jr F41B 6/006
				138/103
4,858,512		ak	8/1989	Jasper, Jr F41B 6/006
4,030,312	А		0/1909	* ·
				124/3
5,237,904	A	*	8/1993	Kuhlmann-Wilsdorf F41B 6/006
5,257,50	• •		0, 1,,,,	102/517
			_,,	102,01.
5,419,234	Α	*	5/1995	Sanderson B64D 7/00
				89/33.16

#### (Continued)

Primary Examiner — Samir Abdosh

(74) Attorney, Agent, or Firm — John P. DiScala

### (57) ABSTRACT

An ammunition magazine is used with a reciprocally-cycled weapon for delinking and firing cartridges in close-end linked ammunition belts. The magazine includes a housing with an ammunition indexing mechanism fixed to one side of the housing. A magazine feed box is disposed above the ammunition indexing mechanism. The magazine feed box includes a movable follower having an upper and a lower position and cam pins that engage cam slots in the magazine feed box. The movable follower is configured to receive a cartridge from the weapon.

### 11 Claims, 61 Drawing Sheets

